



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/806,598

03/23/2004

Gabor C. Temes

068354.1173

2457

31625

7590

09/26/2005

BAKER BOTTS L.L.P.
PATENT DEPARTMENT
98 SAN JACINTO BLVD., SUITE 1500
AUSTIN, TX 78701-4039

EXAMINER

LE, DINH THANH

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/806,598

Applicant(s)

TEMES ET AL.

Examiner

DINH T. LE

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/23/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Specification

The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections

Claim Rejections - 35 USC § 112

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Correction or clarification is required.

In claim 1, the description of the present invention is incomplete because the output circuit on line 5 is not connected to anything. Thus, the claimed output circuit may not perform the recited function. It is unclear what the "N/M portion" on line 9 is, how this portion can be "included" to the communication of the output signal and the output circuit, how this limitation is read on the preferred embodiment or seen on the drawing, and where the output signal on line 5 comes from. The same is true for claim 20 and for reciting "N/M portion" in claim 17.

In claim 2, it is unclear where the "N switched capacitors" on line 2 and the "M-N switched capacitor" come from.

In claim 3, the recitation "output signal" on line 2 is confusing because it is unclear if this is additional "output signal" or further recitation of the previously claimed "output signal" on

Art Unit: 2816

line 5 of claim 1. It is unclear where the “reference signal” on line 3 comes from and what the “(N/M)(input signal)” on line 3 is. The same is true for claims 15-16.

In claim 4, it is unclear how the control circuit can “divide” the M switched circuits, what the “sample signals” are and where they come from.

In claim 5, the recitation “the switched circuits” on lines 2 and 3 lacks clear antecedent basis. It is not understood how the circuits can be selected for inclusion in the first subsets and the second subsets.

In claim 8, it is not understood what the “differential topology” is and how the input, bias sources and reference source can coupled to the switches circuits in accordance with this topology.

In claim 9, the recitation “input signal” on line 3 is confusing because it is unclear if this is additional “input signal” or further recitation of the previously claimed “input signal” on line 2. it is not understood how the control circuitry can cooperate with the swithed capacitor to create the subsets. The description of the present invention is incomplete because the output node id not connected to anything, thus the claimed “output node” may not perform the recited function. It is unclear where the output signal comes from. The same is true for claim 16 and for reciting “cooperating” and “output signal” on line 2 of claim 10.

In claim 12, it is not understood what the “offset component” is.

In claim 13, the recitation “the switched capacitor circuits” (second occurrence” on line 2 lacks clear antecedent basis and it is unclear how the circuits can be “cooperated” to alternate the switched circuits and how the subsets can be “populated”. The same is true for claims 18-19

In claim 16, it is unclear what the “C” on line 9 is.

Art Unit: 2816

In claim 20, it is not understood how the an output signal can communicated with an output node, what the "N/M" and "clock cycle" are.

The remaining claims are dependent from the above claims and therefore also considered indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-22 are rejected under 35 USC 102 (b) as being anticipated by Oprescu (US 6,140,950).

As the best construed, Oprescu discloses in Figures 2, 4 and 6 a circuit comprising:

- a plurality of M switched capacitor circuits (S11...S121, CU1), (S14...S25, CU2) and (S17...S25, CU3) operably coupled together;

- wherein the M switched capacitor circuits operable to receive a signal (VINPUT) from an inherent input source, a reference signal (-VREF) and a bias signal (VBIAS) from inherent sources and further operable to communicate an output signal (Vout) to an output circuit (72); and the M switched capacitor circuits responsive to a control circuitry (74), the control circuitry (74) operable to selectively couple the M switched capacitor circuits to the input source, reference source and bias source such that the output signal communicated to the output circuit (72) includes a portion N/M, where $N < M$, of the input signal;

Art Unit: 2816

- wherein the control circuitry (74) operable to selectively couple N switched capacitor circuits to the reference source, the input source and the bias source, as well as M - N switched capacitor circuits to the reference source and the bias source; and


- wherein the control circuitry (74) and the M switched capacitor circuits operable to produce the output signal approximating $C((\text{reference signal}) - (N/M)(\text{input signal}))$, where C is the total capacitance of the M switched capacitor circuits.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DINH T. LE whose telephone number is (571) 272-1745. The examiner can normally be reached on Monday-Friday (8AM-7PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY CALLAHAN can be reached at (571) 272-1740.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DINH T. LE
PRIMARY EXAMINER
9/20/05